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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,723	10/30/2000	Joel Erwin Goldstein	06076-USA	6932

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AIR PRODUCTS AND CHEMICALS, INC.  
PATENT DEPARTMENT  
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EXAMINER

REDDICK, MARIE L

ART UNIT PAPER NUMBER

1713

DATE MAILED: 12/03/2001

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Please find below and/or attached an Office communication concerning this application or proceeding.

MF-3

**Office Action Summary**

Application No.

09/699,723

Applicant(s)

GOLDSTEIN ET AL

Examiner

Judy M. Reddick

Art Unit

1713

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Information Disclosure Statement**

- 1) ***The information disclosure statement filed on 01/30/01 has been considered and placed in the application file.***

**Claim Rejections - 35 USC § 112**

***The following is a quotation of the second paragraph of 35 U.S.C. 112:***

***The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.***

- 2) ***Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.***
- A) ***The recited "and the like" per claim 1 constitutes indefinite subject matter as per it not being readily ascertainable as to if or how said objectionable phrase further limits the claim.***
- B) ***The recited "vinyl acetate polymer based emulsion" per claims 2-7 constitute indefinite subject matter as per such engendering an inconsistency with the antecedently recited preamble "vinyl acetate based polymer based emulsion".***
- C) ***The recited "catalytic" per claim 5 engenders the non-express establishment of proper antecedent basis.***

**D) The recited "2-hydroxy-2-sulfinato propionatic acid-disodium salt" per claim 4 engenders non-art recognized terminology. Applicants' comments are welcomed.**

**Claim Rejections - 35 USC § 103**

**3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

**(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.**

**4) The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:**

- 1. Determining the scope and contents of the prior art.**
- 2. Ascertaining the differences between the prior art and the claims at issue.**
- 3. Resolving the level of ordinary skill in the pertinent art.**
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.**

**5) Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinschmidt, Jr. et al (U. S. 4,360,632) or Weist et al (U.S. 4,044,197) in combination with applicants' own disclosure.**

**Pinschmidt, Jr. et al disclose an improvement in a process for producing a latex containing dispersed polymer, the improvement comprising polymerizing a reaction mixture of vinyl monomers such as ethylene, vinyl acetate, N methylolacrylamide, etc. in the presence of a stabilizing system**

*using a redox initiator system comprising an oxidizing agent such as hydrogen peroxide, t-butyl hydroperoxide, etc. and a formaldehyde-free reducing agent such as a water-soluble ketone bisulfite(alone or with other reducing agents) so as to form the polymer and wherein, the N-methylolacrylamide is governed by a content of about 0.5 to 10 wt. % and the ethylene is governed by a content of about 5 to 25 wt.%, based on the polymer. See, e.g., the Abstract and cols. 2-3 of Pinschmidt, Jr. et al.*

*Weist et al disclose aqueous dispersions of a self-x-linkable ethylene/vinyl acetate copolymer derived from a) from 5 to 50 wt.% of ethylene, b) from 30 to 87 wt.% of vinyl acetate, c) from 2 to 10 wt.% of a copolymerizable compound containing an N-methylol group, d) from 5 to 20 wt.% of an acryl compound, e) from 0.5 to 3 wt.% of an unsaturated carboxylic acid and f) optionally, a polyolefinically unsaturated monomer wherein, the copolymer is produced via emulsion polymerizing components a) through f) in an aqueous system in the presence of an emulsifier or protective colloid using a redox catalyst system comprising an oxidizing agent such as hydrogen peroxide, t-butyl hydroperoxide, etc. and a reducing agent comprising sodium dithionite, etc. See, e.g., the Abstract and cols. 2-5 of Weist et al.*

*The disclosures of Pinschmidt, Jr. et al and Weist et al differ basically from the claimed invention as per the non-express recognition of the specifically depicted reducing agent per the claimed invention. However, as admitted per applicant, himself, Bruggolite FF-6, a Trade name for the reducing agent falling within the scope of the structurally depicted reducing*

*agents, is a known reducing agent and, to this end, the interchangeability of one well known reducing for another is a matter of ordinary choice to the skilled artisan, absent some evidence of unusual or unexpected results. Criticality for such, clearly commensurate in scope with the claimed invention, not having been demonstrated on this record. See page 6, lines 14-18 of the specification.*

#### **Conclusion**

*6) The prior art made of record and not relied upon is considered illustrative of the general state of the art.*

*7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703) 308-4346. The examiner can normally be reached on Monday-Friday, 6:30 A.M.-3:00 P.M..*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu David can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 305-3599 for After Final communications.*

*Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2381.*

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**JMR** *JMR*  
**November 26, 2001**

*J. M. Reddick*  
JUDY M. REDDICK  
PRIMARY EXAMINER